A subsequent study of the brain and of the muscles of these animals has led to results not entirely in harmony with these views.

Dr. Elliot Smith is of opinion,[1] after an exhaustive study of the Edentate brain, that in this region of the body the present group shows veiy decided points of likeness to the Carnivora; thafc is, so far as concerns the Anteaters. On the other hand, *Orycteropus* is as distinctly comparable with a primitive Ungulate type, such as is exemplified by *Moschus.* " If the brain of *Orycteropus"* he remarks, " were given to an anatomist acquainted with all the other variations of the mammalian type of brain, there is probably only one feature which would lead him to hesitate in describing it as an exceedingly simple Ungulate brain. That one feature is the high degree of inaerosinatism.[2] *Manis,* on the other hand, does not come especially near to *Orycter&gns.* The brain of *Mdnis* conforms to a simple type of architecture, which agrees in many points with both those of *Qr-ycteropus* and the American Edentates ; there is not sufficient evidence to show which type it really favours/* Elliot Smith would, in fact, agree with Max "Weber that it is better, if a division is to be made, to divide the group into three orders:— the Xenarthra (Sloths, Anteaters, and Armadillos), Tubulidentata *(Orycteropus),* and Sqnamata *(Mawis),* instead of into Xenarthra and !N"omarthra,

Messrs. Windle and Parsons[8] *axe* disposed to see in muscular similarities reasons for tmiting *Manis* with the American Edentates, though they confess to being unable to place *Oryeterop'us;* in this animal, they say, *[c] we are more struck by the generalised mammalian arrangement of its muscles than by any special Edentate characters. There are, however, two muscles in *Ovyctcro-p'us* wliieh show peculiarities not found elsewhere than in the Edentates " ;—the triceps, which has more than one scapular head, and the tibialis postietts, which is double. They conclude that *Orycteropus* " presents some feeble claims to be taken into the order."

We shall here adopt the following divisions.

[1] ***Trans. Mnn. Sec.*** **(2) vii. 1898, p. 277.**
[2] **«„«* large olfactory lobes.**
[3] ***Prae. Zo&l. Sec.*** **1899, p. 1014.**